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4/15/04 2:14PM

Subject: NOTICE: Petition for Eligible Renewable Energy qualification

status

Date:

Re: request for "renewable" eligibility for 3 new advanced system technologies

To: STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION Doc no. 03-RPS-1078

Dear Energy Commissioners,

Margret, this is the document you requested we send due to the previous non response from our contact request. Thank you for your assistance, and for your reference we finally did get get contacted by the various parties and discussed various issues, the unanswered questions, the requested (suggested) RPS upgrade wordage plus other very important matters are addressed herein.

I have contacted your department today due my company's discussions and current service requirements with one of the major Calif. utility corporation operators who have asked that we request that you either pre-qualify our technologies for use by them and, or explicitly requested further expanding of the wordage in your RPS guidelines for outlining the attributes required for approved renewable technologies to facilitate the planning, adoption and use of our new design advanced renewable technologies to satisfy new RPS capacity related power acquisitions and facilitate better progress at our scheduled meetings with the utility operators on this topic.

My name is Stephen Schwika, I am Executive Director at Motion Dynamics Group an environmental energy technology research and development company that has created, in conjunction with world famous atomic scientist / physicist, battery and electronics system design specialist Dr. Nelson Camus (Ph.D.), the following low and "zero" emission breakthrough renewable upgrade electric utility power generation technologies:

A. Hybrid fossil fuel / Plasma Hydrogen co-fired generation system - upgrades existing conventional fossil and renewable fueled power plants to displace the need for 30-77% of the normal fossil fuel supply quantity plus reduces emissions

- B. High efficiency AC Battery Energy Storage / Grid Synchronization / Capacity upgrade system (using NO fossil fuel or process heat recovery, outputs NO emissions, plus can use ANY renewable [or emergency secondary fossil] fuel resources) plus...
- C. The new MDG Magnetic Amplification Genset (M.A.G.) for providing a NEW SOURCE of zero emission electric power capacity for the totally automatic harvesting and conversion of waste EMF radiations (electro magnetic frequency the alleged cancer causing component of power lines) and harmonics from any area's transmission and distribution lines in the amount of 4% of the lines real time capacity, 24 hours a day. This 100% pollution FREE new "renewable" source of high quality AC electric power is able to either be:
  - a) used to power loads
- b) can be used to produce hydrogen for motor vehicles or fuel cells (valuable option - due to all of the excess new energy supply this new system will make available) or
- c) stored in the previously mentioned AC BATTERY a similar long term "Pumped Hydro Storage" type energy storage mechanism at near 300% greater round-trip efficiency than is now possible by the CEC "certified renewable" prior-art PUMPED HYDRO STORAGE technologies (that operate at 30% efficiency!). The combination of only these two (2) new breakthrough technologies with the AC BATTERY Power Plant facilitating highly efficient storage all of the M.A.G.'s outputs alone (or Wind machine outputs) of excess off-peak "nighttime" power for "dispatch" during the critical DAYTIME PEAK DEMAND period, can, without burning ANY additional fossil fuel resources, provide between 7-11% of an entire area's or that representative share of the entire state's peak demand power at zero emissions and zero additional new power plant expense and ZERO fossil, renewable or atomic fuel cost.

We are requesting that this breakthrough system (both individual component technologies) be approved and added to the CEC RPS guidelines as a "qualified renewable" since the proposed new California AC Battery / M.A.G. power plant facilities:

- #1 will NOT rely on harvesting, converting or using any fossil fuel waste heat.
- #2 will directly harvest, automatically convert, super efficiently store and dispatch this NEW SOURCE of abundant (like solar/wind/geothermal yet unlike an ordinary electric motor or light bulb "efficiency" upgrade that although can reduce consumption does NOT have any utility function or ability to supply additional utility electric power via additional power supply output wire(s) !) 100% pure sine wave A.C. electric power supply from the Mag Amp Genset's output wires (a valuable new power resource that's now being totally wasted!)
- \* Provides new ability and resource to generate power like having a 10 kilowatt per hour solar PV system installed at every ordinary 50 kW power pole transformer at a fraction of the cost of solar for producing usable power output 24/7/365
- #3 plus AC Battery system can additionally store ANY other certified renewable energy
  - #4 plus supply "stored" reactive (motor starting) power capacity -

so conventional generators DO NOT have to over generate 24 hours-a-day to supply continuous reactive power, to beneficially reduce otherwise "normal" excess emissions and the directly related fossil fuel usage

- #5 system facilitates up to 300% (or more) increased "dispatchable" peak demand output from existing or new (currently intermittent) undependable wind turbines
- #6 the AC BATTERY / M.A.G. system can permit renewables to grid synchronize easier and cheaper plus output more usable power when all other prior art non upgraded systems are outputting zero usable power
- #7 upgrades solar PV (plus wind) enabling it to output usable power during early morning, late afternoon and during cloudy periods- when output is not normally possible by lowering the systems' required grid "connect" threshold
- #8 the system is totally environment and human friendly outputting NO dangerous emissions therefore can be "plug N-Play" installed virtually anywhere
- #9 the system upgrades and enables ANY source of renewable generation to grid intertie with perfect synchronization, plus automatically disconnects upon sensing grid outage, then auto reconnects to provide AC power output when required
- #10 Lower expense and greater operational benefits than all previous available grid intertie, power conditioning, energy storage and auto-disconnect systems
- #11 Breakthrough design outputs a 100% pure TRUE sine wave without using any prior-art power inverter
- #12 Remote control "wireless" option for system monitoring, charge/discharge in a distributed format plus facilitates the immediate or future grid intertie of ANY emergency conventional or Renewable Energy power generation source to the grid through the AC BATTERY power station
- #13 Can instantly "retrofit" upgrade existing Wind or solar PV sites, buildings, large industrial electric motors, sub-stations or power poles so daily PEAK demand loads are operated either without using ANY real time peak power generation or transmission grid resources, or to quickly achieve any degree of peak shaving power consumption target capacity reductions instead of the more costly alternative of building more prior art generation and transmission
- #14 Combined individual system capacities are able to provide the instantaneous "spinning reserve" blackout protection plus the reliable daily peak demand output capacity of one or multiple atomic power plant generation stations with 100% safety, NO dangerous radioisotopes, and operate with zero emissions
- #15 Can facilitate a faster ROI to stimulate and guarantee more and far easier RE project development funding by enabling many more previously marginal or totally unprofitable RE projects' development using existing RE technologies in a more efficient fashion or dispatchable mode where intermittent systems, with this "hybrid" upgrade, like Wind and Solar PV can now dependably power sensitive "digital" electronics applications like at hospitals, manufacturing plants, banks, telecommunications etc. etc. 24/7, plus enable the harvesting of more total available power than the basic RE systems can provide alone in the absence of this advanced tech. renewable upgrade
- #16 Totally eliminates the need for prior art D.C. and heavy expensive D.C. wiring uses ordinary thin gauge A.C. wire for much

higher efficiency and reduced distribution system expense

#17 Perfectly interties any Solar PV panel or Wind TURBINE to ANY grid

#18 Additional extra hours of "guaranteed" 120/240/480 A.C. output - optional

...(at low per kW/hr.

cost)...

#19 Standard 1 hour system provides four times longer duration of spinning reserve capacity than regular type flywheel technology or prior-art conventional battery systems at significantly lower: initial system, O&M and battery replacement expense

#20 Utilities can easily install / retrofit to upgrade residential or commercial buildings load serving ability with this technology to both store purchased off-peak renewable power plus dispatch new power capacity, plus provide the grid intertie for their renewable power generation equipment installations plus stabilize line voltage, eliminate insufficient power "pockets" and increase peak capacity (ALL with one system!) WITHOUT the need to build more and larger new fossil fuel power plants

#21 Provides dramatically improved power quality and increased overall distribution grid system energy reliability from ANY renewable power equipment installations

#22 Ends Blackouts caused by insufficient generation/transmission capacity and bottlenecks (will never happen again) due to the abundant stored energy capacity and newly enhanced ability to start and operate large or combined motor loads "at average" consumption (i.e.: up to 500% less required peak system power consumption) for AC Battery / M.A.G. / renewable generation equipped systems.

After having read your guidelines and noticing your pre-approval of the prior art pumped hydro energy storage method's extraordinarily low (30-38%) efficiency we immediately realized the need for the RPS guideline writers to fully recognize and somehow expand the applicable approved "energy storage" renewable technology definition for "approved renewable" technologies outlined in the RPS to include other viable forms of advanced energy storage technologies, but also fully understand the necessity to somehow prevent (although difficult since you ALREADY allowed such a low efficiency tech. to be "approved" which in reality is probably equal in efficiency to the low end previously used power inverter containing conventional lead acid battery types of energy storage and other systems that, in my opinion, corrupt and collapse the entire "goal" of explicitly requiring or specifying higher efficiency, substantially improved or highly innovative technologies for use by the utilities-of-the-future) low efficiency "renewables" from being used.

My suggestion/request is to somehow specify, in the RPS, that the use of such inefficient and low performance "energy storage" technologies (possibly even to include Pumped Hydro Storage) be discouraged or outright be prevented from qualification and use with respect to this approved technologies RPS's guidelines. After spending years of extensive R&D and millions of dollars in private funds developing what might be the world's most efficient advanced energy storage technology, consisting of multiple individual technology breakthrough components (like the Hybrid Lithium-ion PB ATP gel Battery) , seeing either the

potential approval for use and abuse of such types of ordinary prior-art inverters and similar low efficiency problematic and old fashioned 30-65% efficient lead acid type battery technologies by utilities or by other cash hungry companies, or in the reverse alternative after designing the system of-the-future, to "replace" the prior art already certified "Pumped Energy Storage" system and due the to poor performance of virtually all prior art ordinary inverter/battery techs. and by you not mentioning ANY "approved renewable" guidelines for "battery" type energy storage technologies makes me wonder HOW your committee is going to both prevent what is NOT acceptable - due to low efficiency and reliability, yet make positively sure adequate "approved renewable" wordage is provided so as not to totally prejudice or ignore a REAL SOLUTION consisting of ultra high performance technology that can improve entire categories of current prior art operational defficiencies, capacity insufficiencies and problems by providing new unparalleled renewable technologies' performance benefits. The question to be addressed here now, is WHAT is the exact required wordage required to both prevent the use of prior art, problematic and low efficiency "energy storage" but, in the alternative, provide necessary and explicit RPS guideline wordage that will prompt, encourage and approve the adoption and use of the best energy storage, and other advanced RPS certified "renewable" technologies for California state utilities by their RPS departments' "complying" to the RPS's Approved Renewables "quidelines".

We urge you to upgrade your RPS guidelines in the areas of approved "Energy Storage" to include additional appropriate \*wordage necessary to accommodate the current or future availability of the most desirable high efficiency energy storage and power generation systems. The following is suggested upgrade wordage:

\* Also qualified as RPS certified renewables are 100% Grid-interactive Battery A.C. Electric Power Storage systems, either self-recharging systems - using no conventional grid power, or recharged from RPS certified renewable sources (i.e.: not to include power converted from exaughst waste heat energy sources, but to include power derived by the direct conversion of powerline waste EMF radiations and or harmonics into AC electric power, without reducing using, inducing or diverting to / or from any current flows to normal target loads and without the need for heat, emissions or conversion of any "additional" fossil fuel resources, in order to generate and provide the RPS approved renewable energy storage system's recharge power or alternatively, in order to provide an additional direct load serving (not stored) electric power output source). Also qualified is recharge power (directly or indirectly ...possibly can delete these words) provided by renewable hydrogen produced by certified renewable technologies. In order to qualify as an approved renewable energy storage method the technology must provide to the grid a 100% pure "true" sine wave form, it must also auto disconnect upon outage and automatically reconnect when required, the approved energy storage must have the capability for any quantity of same or different capacity units to be grid connected in parallel - on the same distribution network, plus the non pumped hydro BATTERY AC Energy Storage method must have a round-trip (AC/DC-IN to AC-OUT) total minimum efficiency (suggested)

of 85 percent, plus a minimum five (5) year battery replacement service interval.

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We are also requesting an approved renewable RPS status for our renewable fuel co-fired conventional power plant facilities to be powered by supplemental hydrogen provided by our patented (US Patent no.6,216,480, also see attached shortcut NPATENT doc) advanced technology hardware system, which will serve to provide a portion of the certified renewable fuel required to power conventional electric power plant generation systems. Regarding verification of RPS renewable energy quantity... All conventional fossil fuel power plants and power plant equipment suppliers know what quantity of fossil fuel is required per megawatt hour, of power output to fuel their specific plant each hour. We propose to verify the amount of certified renewable power outputted by our upgraded co-fired fossil fuel power plants simply by measuring the amounts of fossil fuel being used (documented by fuel cost receipts) then by comparing the "actual" amounts of conventional fossil fuel consumed to the normal amount, per megawatt hour, that "should" have been used (consumed), the difference will be the verified amount of certified renewables that qualify for the California (or other similar) RPS quantities of certified renewable energy MW/hours produced and delivered to our CA utility corporation client(s) under the guidelines, the remainder will be sold separately as conventional "brown" energy.

We urge you to describe and or adopt this above method of certified renewables verification in the RPS draft document as a suitable and accurate method to gauge the "actual" amount of certified renewable energy produced out of a co-fired conventional fossil fuel plant fueled by supplemental hydrogen, or possibly other "renewable" fuels.

Please notify me ASAP if our proposed "hydrogen" co-fired conventional power plant upgrade plan to verify renewable energy produced and upgrade renewable fuel technology as described above is or is not approved as a California RPS qualified methedology for providing certified renewable electric power to the California grid system through one or more of the major California electric utility corporations or other smaller recognized utilities who must comply with the RPS's renewables power purchase quidelines.

Please also provide me with a pre-qualification, possibly based solely on the above explanation or other demonstration verification protocol, for verifying the certified renewable energy status of our breakthrough non powerplant waste heat and non "efficiency upgrade" pure wave AC electric OUTPUT power producing Mag. Amp. Genset in order that we can further conduct our pending RPS related utility meeting business and begin to discuss and negotiate California utility renewable power supply contracts.

Please review each of the attached documents (I refrained from attaching any more at this time) for the specific information you require and for better understanding these renewable technologies.

Please let me hear from you with questions and responses, via email and, or US mail..

To be continued... Thank you.

Best regards, Stephen-John Schwika Executive Director Motion Dynamics Group Box 97 Freeland, PA 18224 570/ 443-7892

cc: Margret Kim, Heather Raitt, Tim Tutt